Ethanol and intestinal barrier : human intervention and mechanistic in vitro studies

Stellingen behorend bij het proefschrift

Ethanol and intestinal barrier: human intervention and mechanistic *in vitro* studies

1. Intraduodenal administration of moderate ethanol dosage impairs small intestine and large intestinal barrier function in humans via mechanisms involving mitogen activated protein kinase pathway. *(dit proefschrift)*

2. The nonoxidative metabolites of ethanol fatty acid ethyl esters induce intestinal barrier dysfunction via reactive oxygen species-dependent mechanism. *(dit proefschrift)*

3. Acetaldehyde-induced intestinal barrier dysfunction is mediated by activation of the epithelial to mesenchymal transition factor Snail. *(dit proefschrift)*

4. Short chain fatty acids attenuate ethanol-induced intestinal barrier dysfunction via activation of adenosine monophosphate-activated protein kinase. *(dit proefschrift)*

5. Stress or bacterial-mediated disruption of intestinal epithelial barrier function in irritable bowel syndrome (IBS) may result in adaptive neuro-immunological responses that may lead to longstanding increase of gut permeability and hypersensitivity.

6. IBS is a multifactorial heterogeneous disease that requires a targeted therapeutic approach for subgroup of patients, preferably based on common patho-physiological mechanisms rather than IBD subtypes.

7. Intestinal barrier dysfunction is an important contributor to disease induction and progression in IBD.

8. The intestinal microbiota is a complex ecosystem that is involved in the pathophysiology of both intestinal but also of systemic metabolic disorders.

9. De bron van de eeuwige jeugd ligt verborgen in de stamcellen (Prof. Dr. Hans Clevers; 2013)

10. He who seeks learning without study will attain his end when the raven becomes grey with age. *(Arabic wisdom)*

Elhaseen Elamin
Maastricht 23 januari 2014